EZDIVE FALCON1/FALONET1 MANUAL

Congratulations on purchasing a EZDIVE regulator . We are confident that you will enjoy extraordinary performance from our regulator which is designed and manufactured using the most advanced technology.

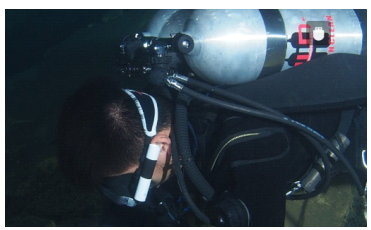
We thank you for choosing EZDIVE and wish you a future of safe dives and underwater enjoyment!

Please do not hesitate to contact us via email ez_diving@hotmail.com

TABLE OF CONTENTS

1. Important warnings
2. CE Certification
   2.1 EN 250:2000 norm regulations and what they mean
3. Important warning reminders
4. Regulator system
   4.1 First stage
   4.2 Second stage

5. Technical features
5.1 First Stages
5.2 Second Stages
6. Preparing for use
6.1 Set-up/in-use warning
7. Coldwater use
8. Equipment care and maintenance
8.1 Care
8.2 Maintenance
9. Nitrox
9.1Main features of Nitrox dedicatedregulators
10. Trouble Shooting



1. IMPOR TANT

WARNING

This manual must be read and understood entirely before using the product. It is advised that you keep this manual in your possession during the entire life of your regulator.

WARNING

When diving you must follow the rules and apply the skills taught by a recognized scuba diving Certification agency. Before taking part in any diving activity, it is mandatory to have successfully completed a scuba diving

course covering both theoretical and technical aspects of diving.

WARNING

This instruction manual does not replace a diving instruction course!

2. CE CERTIFICATION

All EZDIVE regulators described in this manual have obtained the CE certification issued by RIN according to European directive 89/686/EEC. Certification tests have been conducted according to the specifications set by the said directive, regulating the conditions for the release on the market and the fundamental safety requirement for third category Personal Protective Equipment (PPE).The CE mark denotes compliance with the fundamental requirements for health and safety.

WARNING

A SCUBA unit complying with the requirements of the EN 250 norm is not designed to supply more than one diver at a time

If the SCUBA unit is used simultaneously by more than one diver, breathing and cold water performance may no longer satisfy the requirements set forth by EN

250 norm.

3. IMPORTANT WARNING REMINDER

For your protection while using EZDIVE life supportequipment, we call your attentionTo the following:

1. Use the equipment according to the instructions contained in this manual and only after having completely read and understood all instructions and warnings.

2. Use of the equipment is limited to the uses described in this manual or for applications

Approved in writing by EZDIVE

3.Cylinders must only be filled with atmospheric compressed air, according to the EN 12021 norm. Should moisture be present in the cylinder, beside causing corrosion of the cylinder, it may cause freezing and subsequent malfunction of the regulator during dives carried out in low temperature conditions (lower than 10 °C). Cylinders must be transported according to loca rules provided for the transport of dangerous Goods. Cylinder use is subjected to the laws regulating the use of gases and compressed air.

4. Equipment must be serviced by qualified personnel at the prescribed

intervals. Repairs and maintenance must be carried out by an Authorized EZDIVE Dealer Service facility and with the exclusive use of original EZDIVE spare parts.

5. Should the equipment be serviced orrepaired without complying with procedures approved by EZDIVE or by untrained personnel or not certified by EZDIVE or should it be used in ways and for purposes other than specifically designated, liability for the correct and safe function of the equipment transfers to the owner/user.

6. If the equipment will be used in cold water (temperature lower than 10° C (50° F) it will be necessary to use a regulator suited for such temperatures.

⚠ WARNING

Diving in cold water requires special equipment and techniques. Before diving in cold water we strongly recommend you obtain adequate training from a recognized training agency.

EZDIVE refuses all responsibility for damages caused by non-compliance with the instructions contained in the manual

4. Regulator

A regulaor system is required to reduce the pressure of the compressed air contained in the cylinder to ambient pressure in order to supply the breathing air you need.

4.1 First stage

A pressure-reducing mechanism that reduces the pressure of the compressed air contained in the cylinder to an intermediate relative pressure of about 9.5 bars (138 psi). The first stage uses a standard piston, balanced piston or diaphragm mechanism.

4.2 Second stage

This unit is supplied, with the intermediate pressure coming out of the first stage through the low pressure hose. It reduces pressure further to balance air with the ambient pressure. The second stage is balanced and equipped with a Venturi effect control and with an inhalation resistance control. All EZDIVE regulators can be identified via a serial number. The number is printed on the housing of the second stage and on the metal body of the first stage.

This warranty covers material and manufacturing defects (with the exception of o-ring seats, filter, mouthpiece and low pressure hose).
The big knob is to adjust Inhalation resistance control and the small knob is to control the Venturi effect

1 First stage with threaded DIN connection
2 Second stage Retaining yoke and screw
3 DIN inlet protective cap
4 DIN retaining wheel
5 Rotating swivel
6 Dry balance chamber
7 High pressure port
8 Purge button
9 Exhaust delector
10 Inhalation resistance control
11 V.I.V.A. control
12 Low pressure hose

5. Technical Features

Our expertise in producing high quality components Of regulator ,combined with 15 years of experience,ensure

maximum reliability and safty.

5.1 First Stages

Balanced Piston

First stages with air balanced pistons deliver significantly more air to the second stage than any other first stage, while their performance is totally unaffected by the changing tank pressure.

Balanced system allows the use of lighter and more sensitive components, resulting in ultra fast breathing response, instant delivery of air on demand and extra high air low.

Rotating swivel

With this feature, all inter-stage pressure hoses attached with the swivel have the ability to rotate in the best possible position to optimize hose distribution and lessen jaw fatigue.

Intermediate Pressure Port

The 5 intermediate pressure ports enables the connection of equipment of such as octopus second stage,buoyancy compensator,drysuit hose and other accessories.

High Pressure Port

Sophisticated first stages are equipped

with two high pressure ports, allowing the SPG and transmitter.

5.2 Second Stages

Balanced system

Balancing the pressure forces acting withinthe demand valve allows the use of a much lighter spring load decreasing the inhalation resistance and providing a smoother breathing second stage.

Diver adjustable inhalation resistance control

Second stages equipped with thissystem have an over-sized external control knob Acting directly on the spring tension allowing the diver to adjust the inhalation resistance in order to adapt it to the needs of the dive conditions.

Adjusting the control knob(clockwise rotation) causes an increase in inhalation resistance. Adjusting with a counterclockwise rotation reduces the Spring tension for lower inhalation effort.. All depends on the diving conditions, such as in strong currents, when the diver spends some time with his head down and when the second stage is used as an alternate air source (octopus).

Venturi Effect knob
Turning the knob enables and disables something called the Venturi Effect, which regulator designers take advantage of to assist breathing

WARNING

A hight inhalation resistance does not imply low air consumption rate, in fact it may have opposite effect due to higher effect required to trigger the air flow increaseing your work of breathing

5.3 Technical features

First Stage
Air balanced flow-through piston design
Chrome plated brass body
Cold water: Anti-Freeze protection
Oxygen Compatible
Low pressure ports: 5 on swivel turret
High pressure ports: 2
Weight: : 550g
Ventilation rate: Air Supply / 3000
PSI :270 SCFM
Intermediate Pressure : 135-145 PSI
CE marked and approved

Second Stage
Air balanced flow-through design
Chrome plated inlet tube
Cold water: Anti-Freeze protection

Nitrox Compatible
High comfort mouthpiece
Intermediate Pressure : 145 PSI
Cracking Effort: 0.8-1.4 CIW (Column inches of Water)
WOB @ 50M: 0.8 J/L
Flow rate: 50 SCFM (air supply: 3000 PSI)
Weight: : 450g
Air flow control knob and Venturi lever
CE marked and approved

6 Preparing to use

Make sure you receive proper dive training from recognized diving agency before using the regulator. EZDIVE will not take responsibility for improper use of regulator.

WARNING

While opening the valve ,the pressure gauge face must not be directed towards the user.

WARNING

When opening the cylinder valve ,the second stage purge button should be slightly depressed,so the second stage

WARNING

valve is open. Do not push down the purge button in low temperature
Never connect a low pressure hose to a

high pressure port. These threads are different sizes and are not compatible

DIN CONNECTION

7 Cold water use

EN 250:2000 norm defines "cold waters" as those having a temperature lower than 10° C (50° F) and requires tha regulators certified for use in such conditions must be tested and approved to work properly in temperatures of 4° C (39° F). If the SCUBA equipment is used in water with a temperature lower than 10° C (50° F) it is important to keep in mind the following:

1.Use only regulators certified for use in these conditions.

2. Prior to the dive keep the regulator in a warm environment before fitting your regulator on the tank.

3. If the regulator is exposed to colder conditions, much lower than0° C(32° F), set the to avoid therisk of spontaneous and uncontrolled free-low.

4. avoid simultaneously using the

buoyancy compensator and dry suit inlatorand the alternate air source. Its also advised to avoid checking the second stage function via the purge button, unless absolutely necessary.

5. In extremely cold water diving, EZDIVE recommends the use of twin tank with manifold

⚠ WARNING

Diving in cold water requires special equipment and techniques.Before attempting cold water dive ,obtain adequate training from recognized diving agency

8. EQUIPMENT CARE

8.1 Care

EZDIVEregulators are precision devices that are essential to the diver's Safety. For this reason EZDIVE uses only materials that have been selected, after thorough testing, as the best for efficiency and durability.

To ensure that your regulator is always in perfect condition, a minimum of care And maintenance is required.

1. After every dive and especially if in chlorinated water (pools),rinse the regulator with fresh water, preventing

water fromentering the system by following these steps:

2. Ensure that the high pressure inlet of the first stage regulator is closed with the special protective cap.

3. Should water accidentally enter the low pressure hose, connect the regulator to the cylinder, open the valve and press the second stage purge button down until all water has been expelled.

4 Dry your regulator completely in a dry ventilated place, away from heat and direct sunlight.

8.2 Maintenance

Do not use silicone grease on silicone components, as this may cause some parts to deform. In addition, do not use silicone grease on components in the high pressure area of the irst stage as this would compromise the compatibility with Nitrox mixes.

EZDIVE regulator must be overhauled by an authorized EZDIVE technician after 100 dives or not later than every 2 years, whichever comes first.

9. Nitrox

⚠ WARNING

To prevent severe and potentially lethal

injuries DO NOT dive using Nitrox (oxygen enriched air) mixes unless you have first obtained adequate training and certification in their use by a recognized certification agency.

⚠ WARNING

Maximum operating depth (MOD) and exposure times to Nitrox (oxygen enriched air) mixes are dependent upon the oxygen concentration of the mix in use.

Standard production EZDIVE regulators distributed use DIN connections and are manufactured with materials(seats, oring and lubricants) and assembly procedures ensure compatibility with gas mixes containing oxygen up to100%.

10. trouble shooting

Problem 1: After opening the cylinder the pressure gauge read zero

Cause: Empty tank

Broken gauge or tank valve

Solution: Refill the tank

Send the pressure gauge and valve for repair

Problem 2 :HP or LP leak

Cause : Damaged Oring or Hose connection gets loose

Solution: Change oring or tighten the connection

Problem 3: Regulator Free flow

Cause : Venturi effect has been triggered

Malfunction regulator

Solution: Cover the mouthpiece with finger or Direct the mouth piece down

If free flow continues, give up the dive and send the regulator for repair

Problem 4: Water leak in second stage

Cause: Dirt or malfunction of exhaust valve

Damage to mouth piece or Diaphragm

Solution: Send the second stage for repair

11. Warranty

Warranty claims must be returned with All dated proof-of-purchase to an Authorized EZDIVE Dealer. Product serial number and the proof-of-purchase must match.

Visit www.ezdivegears.com for the dealer nearest you.

EZDIVE will offer free repair service to First Stage and Second stage within 5 years since purchase date.(dive shop use only 2 years of warranty)

Vailid warranty requires proof of service in EZ authorized dealer (Every 2 years or

100 dives)
warranty does not cover:

- Loss.
- Ordinary maintenance cost
- Defects, damage or deterioration due to wear and tear to excessive or collision
- Damage caused by exposure to heat, prolonged sunlight or corrosive chemicals.
- Damage due to poor maintenance, over use, alteration, negligence
- Leaking because improper maintenance of the o-ring
- Damage due to repair by someone other than EZDIVE or an Authorized EZDIVE Dealer.
- Issues with look that do not affect function of the product are not covered under warranty.

European Union markets: the warranty of this product is governed by European legislation in force in each EU member state.

EZDIVE FALCON1/FALONET1 调节器手册

感谢您购买 EZDIVE 调节器. 我们的调节器拥有先进的科技，我们相信您会感受到我们调节器的优越性能

如果有任何疑问，欢迎您通过邮件联系我们

ez_diving@hotmail.com

内容目录

1. 重要提示
2. CE 认证
   2.1 EN250:2000 标准
3. 重要提示
4. 调节器系统
   4.1 一级头
   4.2 二级头
5. 技术特点
   5.1 一级头
   5.2 二级头
   5.3 技术参数
6. 准备使用
   6.1 组装和使用注意事项
7 冷水使用
8. 装备保养和维护
   8.1 保养
   8.2 维护
9. 高氧使用
   9.1 高氧使用的调节器
10 问题解决方法

1. 重要提示

WARNING

本手册需要在使用前仔细阅读，建议保存本手册以备查阅

WARNING

当潜水前，您必须参加潜水协会课程学习潜水理论和技巧，并且遵守潜水规则

WARNING

本手册并不是潜水教材!

2. CE 认证

所有 EZDIVE 调节器都已经根据欧盟 89/686/EEC 法令获得 CE 认证，本产品符合潜水安全和健康标准

WARNING

所有符合 EN250 标准的调节器不能供应超过一个潜水员

如果调节器同时供两名潜水员使用，或者在冷水使用（低于 10 度），则不再符合 EN250 标准

3. 重要提示

当您使用 EZDIVE 调节器作为生命支持工具时，我们应该遵守以下原则：

* 在使用前认真阅读使用守则
* 使用调节器必须按照本手册的指引
* 潜水气瓶只能充填符合 EN12021 标准的气体，如果湿气进入气瓶，会导致气瓶腐蚀，同时也会导致调节器在寒冷水域结冰而发生故障（低于 10 度的水域）

* 潜水气瓶运输必须符合当地危险品运输法律

* 调节器必须由 EZDIVE 授权经销商进维修保养并且使用 EZDIVE 提供的配件。如果非授权人员进行维修保养，将导致保修无效。如果将 EZDIVE 调节器用于非指定用途，EZDIVE 将不承担任何责任

* 如果调节器用于冷水(低于 10°C (50°F))，请使用适合冷水使用的调节器型号

WARNING

在冷水潜水需要特殊的装备和训练，在参加冷水潜水前，我们应该获得恰当的冷水潜水训练

EZDIVE 拒绝对任何不遵守本手册规定而造成的损伤负责

4 调节器系统

调节器系统是用来将气瓶中的高压气体降低为呼吸周围的常压

4.1 一级头

将气瓶中的高压气体降低为 9.5 bars (138 psi)左右的中间压力的装置。使用标准的平衡式活塞或者横膈膜一级头

4.2 二级头

将一级头的中压降低为呼吸周围常压的装置。二级头是平衡式的，并且有文式效应控制阀以及呼吸抗阻调整

所有的 EZDIVE 调节器都有序列号，序列号将标识在一级和二级头上

保修范围涵盖材料和生产缺陷（不包括 O 圈，过滤芯，咬嘴和低压管）。

5　调节器技术参数

我们的调节器工厂有 15 年的调节器生产经验，确保了最佳的可靠性和安全性

5.1 一级头

平衡式活塞

平衡式活塞一级头供应气体量比其他一级头明显大很多，并且不受气瓶剩余压力影响，平衡式系统允许使用更加轻巧和敏感的部件，这样呼吸更加顺畅，调节器反应更加灵敏。

低压接口旋转塔

所有低压接口都在这个旋转塔上，这样可以将低压管调整到最佳的角度，使整个装备保持最佳流线型

中压接口

5 个中压接口可以满足主备用调节器接口，浮力控制器接口和干衣接口

两个高压接口可以接气压表和传感器

5.2 二级头

平衡二级头

平衡二级头使用较软的弹簧确保呼吸顺畅

呼吸抗阻调节钮

该按钮可以调节二级头弹簧的松紧，从而调节呼吸抗阻，适应不同的潜水环境，顺时针调整可以增加呼吸阻力，逆时针调整可以降低呼吸阻力。这都取决于潜水环境，比如在

强流环境，寒冷环境和将二级头作为备用调节器

文式效应钮

旋转该按钮可以调控文式效应，调节器的设计利用该特性来帮助顺畅呼吸

⚠ WARNING

高呼吸抗阻并不代表更低的气量消耗速度，反而会影响呼吸的顺畅性，可能导致缺氧

5.3　调节器技术数据

一级头

技术: 顺流阀平衡式一级头

材质: 黄铜镀铬

冷水使用: 防冻设计（使用温度不低于 10 摄氏度）

高氧: 适氧服务

中压接口: 5

高压接口: 2

重量 :550g

流量速度: 270 SCFM (air supply: 3000 PSI)

中压: 135-145 PSI

配置:　DIN 200 -300bar

CE 认证

二级头

平衡式设计

镀铬进气口

冷水: 防冻设计

可以纯氧使用

高质量咬嘴

中压 ：145 PSI
打开供气阀门所需的力（Cracking Effort）：
0.8-1.4 CIW
呼吸阻力 WOB @ 50M: 0.8 J/L
流量速度: 50 SCFM (air supply: 3000 PSI)
重量: 450g
流量控制钮和文氏效应控制杆
CE 认证 PRESSURE: 135-145 PSI
INTERMEDIATE PRESSURE: 135-145 PSI

6 准备使用

在使用调节器进行潜水前必须接受恰当的潜水训练，EZ 无法对不恰当使用调节器产生的后果承担责任

⚠ WARNING

当打开气瓶阀时，压力表不应该对着使用者

⚠ WARNING

当打开气瓶阀门时，应该轻按二级头排水阀，但是在冷水使用时应该避免按排水阀

⚠ WARNING

不要将低压管接在高压接口，低压接口和高压接口大小也不相同

7 冷水使用

EN250:2000 标准只针对在 10 摄氏度以上工作的调节器。如果要在 10 摄氏度以下使用需要遵守以下规则

1.使用被认证冷水使用的调节器（4 摄氏度）
2.在组装气瓶前，将调节器放在温暖的环境
3.如果调节器在低于零摄氏度的环境使用，

需要设置防止控制不住的漏气

4.避免同时使用干衣充气，BCD 充气和备用调节器

5.在冷水潜水，我们建议使用带连接杆的双瓶

WARNING

在冷水进行潜水需要特殊的装备和训练，否则可能导致严重后果

8. 装备维护和保养

8.1 维护

EZDIVE 调节器是生命维持工具，所以我们的产品严格选材，经过严格的测试确保有效和耐用。为了确保调节器正常工作，我们需要遵守以下步骤进行维护

1 每次潜水后，都使用淡水清洗

2 确保一级头高压入口使用保护盖遮挡，防止海水和灰尘进入

3 如果不小心让水进入低压管，将调节器连在气瓶，打开阀门，按二级头排气阀确保所有水都被排出

4 将调节器放在阴凉的地方风干，避免太阳直射

8.2 保养

不要在一级头高压部件使用硅油，这样会导致调节器无法被用于高氧使用。EZDIVE 使用特殊的适氧润滑剂

EZDIVE 调节器每使用 100 潜或者超过 2 年需要由授权经销商进行保养

9. 高氧

WARNING

为了防止严重致命后果，在使用高氧前，必须获得恰当的潜水训练

WARNING

最大可操作深度和暴露时间取决于高氧气体中的氧气含量

标准的 EZDIVE 调节器使用 DIN 接口, 使用的部件(底座，O 圈和润滑剂)和组装程序可以适用于纯氧使用

10 问题解决

问题 1: 打开气瓶后，压力表读数为零

原因: 空气瓶

仪表故障或者阀门故障

问题解决: 给气瓶充气

将仪表和阀门送修

问题 2 :高压或低压接口漏气

原因 :O 圈破损或者接口松脱

问题解决: 更换 O 圈或者扭紧接口

问题 3: 调节器漏气

原因 : 启动文式效应

调节器故障

原因: 使用手指盖住调节器咬嘴或者将咬嘴朝下

如果继续漏气，放弃潜水，将调节器送修

问题 4: 二级头漏水

原因: 杂质或者排气阀的故障

咬嘴和横隔膜破裂

问题解决：将调节器送修

11 保修说明

必须向 EZDIVE 的经销商提供产品购物凭证来获得保修

访问 www.ezdivegears.com 来了解最近的经销商

EZDIVE 一级头提供 5 年的免费保修，终身维修

EZDIVE 二级头提供 5 年的免费保修，终身维修

（潜水店使用的免费保修期为 2 年）

保修需要提供在 EZ 授权经销商的保养证明

（每 2 年或者 100 次潜水）

保修不涵盖:

- 丢失
- 定期保养
- 因为过度使用导致的故障，损坏或者老化
- 因为过热，长时间暴晒和化学物质腐蚀导致的损坏
- 因为不恰当使用和保养导致的漏水和其他故障
- 因为 EZDIVE 及经销商专业人员以外的的人士维修导致的故障
- 不影响使用的外观损坏

针对欧盟市场，产品保修由各欧盟成员国的法律管辖